REMARKS

Claims 1-13 are pending in this application. By this Amendment, claim 1 is amended to further distinguish the claims over the cited references, by reciting that the electro-optical device further includes a relay electrode that electrically connects one of the switching elements to one of the pixel electrodes, with each of the capacitor wire, the electrodes of the exterior circuit connection terminals and the relay electrode being formed of a same material. Dependent claim 13 is added to recite an example of the same material. Support for amended claim 1 and new claim 13 may be found in the original specification at, for example, paragraphs [0095], [0097] and [0098], describing that the capacitor wire 400, the relay electrode 402 and the extending capacitor wire 404 (forming the exterior circuit connection terminals 102) are each comprised of a same material, for example each comprised of a two-layered structure of an aluminum-based layer as a lower layer and a titanium nitride-based layer as an upper layer. No new matter is added by this Amendment.

I. Rejections Under 35 U.S.C. §103(a)

A. Claims 1-7, 9 and 12

Claims 1-7, 9 and 12 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,597,413 ("Kurashina") in view of U.S. Patent No. 6,577,371 ("Hirabayashi") and further in view of U.S. Patent No. 6,678,017 ("Shimomaki"). This rejection is respectfully traversed.

Amended claim 1 is directed to an electro-optical device in which the capacitor wire (which supplies a predetermined potential to the capacitor electrodes), the electrodes of the exterior circuit connection terminals, and the relay electrode (which electrically connects one of the switching elements to one of the pixel electrodes) are each formed of a same material. None of Kurashina, Hirabayashi or Shimomaki describe an electro-optical device including such feature.

As described in paragraph [0014] of the specification, advantages of the claimed electro-optical device include that since the capacitor wire and the electrodes are formed of the same material, in both the image display region and the peripheral region, it is not necessary that the wire extending from the electrodes forming the exterior circuit connection terminals be electrically connected via a contact hole to the capacitor electrode forming the storage capacitor in the image display region or the wire supplying a predetermined potential to the capacitor electrode. Accordingly, the generation of inconveniences such as horizontal cross-talk caused by contact holes having irregular properties can be suppressed. In addition, since the electrode and the capacitor wire are formed of the same material, the electrode and the capacitor wire can be formed to have lower resistance, and again the generation of inconveniences can also be suppressed.

In the Office Action, the Patent Office acknowledged that Kurashina and Hirabayashi do not describe that the capacitor wire and the electrodes of the exterior circuit connection terminals are each formed of a same material. The Patent Office alleged that Shimomaki suggests this design feature, and thus allegedly remedies the deficiencies of Kurashina and Hirabayashi. Applicant respectfully disagrees.

While Shimomaki indicates in Figures 3-9, and describes at col. 8, lines 9-15, that external connecting pad 22 and an auxiliary capacitor line 11 may be formed of a same material, Shimomaki nowhere describes that a relay electrode that electrically connects one of the switching elements to one of the pixel electrodes must also be comprised of the same material. Shimomaki nowhere describes relay electrodes, much less that any relay electrodes must be comprised of a same material as the capacitor wire and the electrodes of the exterior circuit connection terminals.

Shimomaki describes that the switching elements therein are comprised of a thin film transistor with source and drain electrodes, with the source electrodes contacting the pixel

electrodes. See claim 4. Furthermore, the source electrode is indicated to include a material (metal) having a higher oxidation-reduction potential than that of an Al-based metal, whereas the external connecting pad 22 and an auxiliary capacitor line 11 are indicated to be comprised of an Al-based metal. See claim 4 and col. 8, lines 1-15. The source electrodes and the external connecting pad and auxiliary capacitor line thus include different materials. Shimomaki thus neither indicates inclusion of a relay electrode, nor inclusion of a relay electrode comprised of a same material as a capacitor wire and electrodes of exterior circuit connection terminals. Moreover, nothing in Shimomaki indicates any advantages to be obtained from the capacitor wire, the electrodes of the exterior circuit connection terminals and the relay electrode being formed of a same material.

For the foregoing reasons, Applicant submits that Kurashina, Hirabayashi and Shimomaki provide no reason or rationale for one of ordinary skill in the art to have been able to have derived the electro-optical device of claim 1 or claims dependent therefrom. Withdrawal of this rejection is thus respectfully requested.

B. Claims 8, 10 and 11

Claim 8 was rejected under 35 U.S.C §103(a) as allegedly being unpatentable over Kurashina in view of Hirabayashi further in view of Shimomaki, and still further in view of U.S. Publication No. 2006/0102903 ("Kim").

Claim 10 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kurashina in view Hirabayashi further in view of Shimomaki, and still further in view of U.S. Publication No. 2003/0202800 ("Matsushima").

Claim 11 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kurashina in view of Hirabayashi further in view of Shimomaki, and still further in view of U.S. Patent No. 6,480,244 ("Murade").

Each of the above rejections is respectfully traversed.

Each of Kim, Matsushima and Murade were cited as allegedly describing particular aspects of dependent claims 8, 10 and 11, respectively. It is not necessary to discuss the alleged teachings of these references as asserted by the Patent Office with respect to the features of claims 8, 10 and 11, because none of Kim, Matsushima and Murade remedy the deficiencies of Kurashina, Hirabayashi and Shimomaki detailed above with respect to claim 1. That is, Kim, Matsushima and Murade also do not describe an electro-optical device in which the capacitor wire, the electrodes of the exterior circuit connection terminals, and the relay electrode are each formed of a same material.

Accordingly, withdrawal of each of these rejections is respectfully requested.

C. Claim 13

None of Kurashina, Hirabayashi and Shimomaki, Kim, Matsushima and Murade describe the additional feature of new claim 13, in which each of the capacitor wire, the electrodes of the exterior circuit connection terminals, and the relay electrode are each formed of an aluminum-based layer as a lower layer and a titanium nitride-based layer as an upper layer. Claim 13 thus further distinguishes over the cited references for at least this reason.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-13 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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